

## **Fish and Chips-Genomic Applications to New Toxicological Challenges**

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As a project funded under the Georgia Basin Action Plan, the Toxicology Section of Environment Canada's, Pacific Environmental Science Centre (PESC) is conducting toxicological studies on effluents from municipal waste water treatment plants that discharge into the Georgia Basin. The purpose of these studies is to determine the potential for the effluents, at receiving water concentrations, to cause endocrine disruptor effects to salmonids. PESC is using both conventional toxicological endpoints and gene array technology (genomics) to determine potential molecular level toxicity resulting from exposure to endocrine disrupting substances contained in the effluent. The PESC gene array is a "targeted salmonid gene array" with focus towards estrogenic -responsive genes. The presentation will focus on the development of the gene array and the application of toxicogenomics methods and molecular endpoint measurements to the determination of estrogenic effects on salmonids.